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## Lifestyle changes in coronary heart disease—Effects of cardiac rehabilitation programs with focus on intensity, duration and content—A systematic review

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### ABSTRACT

Background: Although coronary heart disease (CHD) is the most common cause of death worldwide the literature shows a wide variation in the arrangement of cardiac rehabilitation and achieved lifestyle changes. Aim: The purpose of this study was to evaluate the effects of intensity (number of patient follow-ups), duration (length of intervention) and content in cardiac rehabilitation programs (CRP) regarding lifestyle changes in patients with CHD. Method: A systematic literature review of articles published in the databases PubMed and CINAHL between 1990 and 2007 was conducted. This resulted in 1120 hits of which 25 articles finally met the set criteria for inclusion. Results: The majority of significant positive results on lifestyle factors were shown among the studies describing high intensity and long duration. Included studies showed a wide variation in content, but four different interventions (informative content, educational content, practical content, behavioral and self care-oriented content) emerged. The group of studies which contained all four interventions focused on most lifestyle factors and achieved the most significant positive results. Conclusion: This systematic literature review shows that CRP should include high intensity, long duration and an intervention content covering information, knowledge, practical training, self care-activity and behavior changes in order to achieve effect on all four lifestyle factors of diet, physical activity and exercise, smoking and stress. Lifestyle changes can be reached in less lifestyle factors, with a longer duration and a variation of intensity of contacts but in combining with an informative and educational content with an additional content of a practical nature or self activity.

### KEYWORDS

Coronary Heart Disease; Secondary Prevention; Cardiac Rehabilitation; Lifestyle; Intensity; Duration; Content; Systematic Review

### Cite this paper

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